

Project No: 8161
Project Name: Midtown East Parking Garage
DRAFT

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AMENDMENT TO AGREEMENT 1
FOR CONSULTATION AND OTHER SERVICES

This Amendment is entered into this 1st day of August 2006, by and between the City of Milpitas, a municipal corporation of the State of California (hereafter referred to as "CITY") and Consolidated Engineering Laboratories (CEL) (hereafter referred to as "CONSULTANT").

RECITALS

WHEREAS, the parties desire to amend the Agreement to allow CONSULTANT to provide professional project special inspection and testing services for the Midtown east parking garage.

NOW THEREFORE, in consideration of the mutual covenants and conditions herein contained, the parties agree to amend the Agreement as follows:

1. The first sentence in Subsection 1.1, entitled "Term of Services" is amended to read:

The term of this Agreement shall begin on the date first noted above and specified in Exhibit "A", and shall end on **December 1, 2007**.

2. Section 1, entitled "Services" is amended by adding Exhibit **"A, titled "City of Milpitas East Parking Garage Milpitas, California Materials Testing and Special Inspection"**, which is attached hereto and incorporated by reference herein.
3. Section 2, entitled "Compensation" is amended to add Exhibit **"A, titled "City of Milpitas East Parking Garage Milpitas, California Materials Testing and Special Inspection"**, which are attached hereto and incorporated by reference herein. Section 2 is further amended by adding the following to the end of the Section:

The compensation for the services set forth in Exhibits **"A, titled "City of Milpitas East Parking Garage Milpitas, California Materials Testing and Special Inspection"** is a "not to exceed" amount. The total maximum amount of compensation to be paid for tasks outlined in Exhibits **"A, titled "City of Milpitas East Parking Garage Milpitas, California Materials Testing and Special Inspection"** shall not exceed \$128,000.

4. The Consultant agrees to maintain and pay for all insurance policies as stated in Section 4, entitled "Insurance Requirements" of the Agreement dated **April 18, 2006**, between **Consolidated Engineering Laboratories (CEL)** and the City of Milpitas. The Consultant shall provide the City with renewal certificates of the current policies upon the expiration of the current policy.

5. All other provisions of the Agreement shall remain in full force and effect.
This Amendment is executed as of the date written above.

APPROVED BY:

CITY OF MILPITAS

CONSULTANT

City Engineer as to content

City Manager

City Attorney as to Form

ATTESTED BY:

City Clerk



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June 22, 2006
Revised: June 29, 2006

Mr. Mark Rogge
City of Milpitas
Building & Safety
455 East Calaveras Boulevard
Milpitas, California 95035

Subject: *City of Milpitas – East Parking Garage; 120 North Main Street, Milpitas, California
CEL #10-01108PW
Materials Testing and Construction Inspection Services*

Dear Mr. Rogge:

Consolidated Engineering Laboratories (CEL) is pleased to submit our revised cost proposal to provide materials testing and construction inspection services for the City of Milpitas – East Parking Garage project, located at 120 North Main Street in Milpitas, California. Consolidated Engineering Laboratories would be proud to be part of your team, helping to ensure the construction quality and success of this project.

Following is our cost estimate and scope of services. We assembled this proposal based on the following sources:

- Review of architectural and structural drawings, dated June 16, 2006;
- Review of project specifications, dated June 16, 2006;
- Review of Special Inspection and Testing Schedule provided by the City of Milpitas, dated May 4, 2006.

The foundation design will be determined at a later date. The base bid includes the utilization of prestressed piling. An alternate has been provided, should the project be constructed using augercast piles. When the foundation design is ultimately determined, an adjustment to the proposal may be accomplished by deducting the bid amount that does not apply.

Since the General Contractor has not yet been selected nor is there a detailed construction schedule available, CEL has approximated the concrete placements and other activities requiring inspection. We have attempted to be conservative while developing our estimate. However, we recommend that the proposal be revisited once a contractor has been selected and a detailed construction schedule is developed.

You will be pleased to discover that CEL is discounting our normal hourly and unit rates from our typical "On-Call pricing" because our near-continuous presence for the duration of this project.

Thank you for giving Consolidated Engineering Laboratories the opportunity to be a part of your project team. We are committed to giving our clients the best service for their testing and inspection needs, and are eager to prove this commitment to you. Should you have any questions or require additional information, please do not hesitate to contact me.

Respectfully submitted,
CONSOLIDATED ENGINEERING LABORATORIES

Cal Dickerman
Vice President, Marketing

Greg J. Fernald
Project Manager

CD:GJF/svk



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BASIS OF PROPOSAL

This proposal was based upon our review of the structural drawings and specifications, as they existed at the time of the submittal. Our base bid is inclusive of the prestressed pile foundation and we have given you an alternate for the augercast pile foundation work. We have assumed that the Geotechnical Engineer of Record will provide all related inspections for the pile-driving activity and/or the augercast pile activity, although a proposal could be generated which allow CEL to become the Geotechnical Engineer of Record for the project and to perform dual activities for the augercast piles so as to eliminate redundancy of inspections. If the augercast pile alternative is decided upon, we recommend that this option be explored.

Based on our conversation with you, it is our understanding that there will be five (5) to six (6) augercast piles completed daily, rather than four (4) with a total schedule time of forty-five (45) days for the work.

Generally, when CEL puts together a proposal we discuss the construction schedule with the contractor and subcontractors. As the project has not yet gone to bid, CEL's estimators have quoted the project based upon past experience. Our estimated quantities are outlined on the following pricing sheet.

In the course of developing this proposal, we have attempted to provide a very thorough. Quality Assurance program, and have allocated eight (8) hours of reinforcing steel inspection before each of the thirty-one (31) concrete placement activities scheduled for the project. In addition, we have allocated two (2) full-days of tendon placement inspection prior to the five (5) elevated, post-tensioned concrete deck pours. We have assumed that all decks will be stressed in one day.

MANPOWER

It is our intention to utilize Robert Barth as our Resident Inspector for your project. Although he will not have the continuous presence onsite and has other duties on other projects, this project will be assigned as a primary project for him, and he will perform those inspection activities, as outlined.

OVERTIME ALLOWANCE

We have included a \$10,000 overtime allowance to cover the occasional overtime which may be encountered over the course of the project. This allowance is to cover activities such as concrete pours extending beyond a normal eight (8) hour day, reinforcing steel being buttoned-up late in the day in order to accommodate a pour for the next day, stressing operations beyond eight (8) hours, and Saturday or Sunday morning sample breaks, in order to accommodate stressing crews on the weekends and to keep the project on schedule.

SCOPE AND SCHEDULE

We are including another contingency of \$10,000 to cover increase of scope to the existing services, in case we are asked to perform additional inspections such as mechanical/electrical/plumbing activities, floor flatness or other supplementary tasks. The schedule contingency component is to cover additional hours caused by potential difficulties, which necessitate further Quality Assurance inspection to assure contractor compliance. Please note that this contingency will only be retrieved as necessary.



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CITY OF MILPITAS
EAST PARKING GARAGE
MILPITAS, CALIFORNIA

CEL #10-01108PW

REVISED PRICING

Description	Quantity	Unit Rate	Subtotal	
REINFORCED CONCRETE				
Mix Design Review	1 Each	\$ 100.00	\$ 100.00	
Reinforcing Steel	200 Hours	\$ 65.00	\$ 13,000.00	
Concrete Placement	248 Hours	\$ 65.00	\$ 16,120.00	
Compression Tests	270 Cylinders	\$ 24.00	\$ 6,480.00	
Sample Pick-Ups	31 Trips	\$ 40.00	\$ 1,240.00	
SUBTOTAL:				\$ 36,940.00
POST-TENSIONED CONCRETE				
Tendon Tests	9 Each	\$ 268.00	\$ 2,412.00	
Tendon Reinforcing Placement	80 Hours	\$ 65.00	\$ 5,200.00	
Concrete Placement	40 Hours	\$ 65.00	\$ 2,600.00	
Slump Control	40 Hours	\$ 65.00	\$ 2,600.00	
Stressing Inspection	40 Hours	\$ 65.00	\$ 2,600.00	
Compression Tests	180 Cylinders	\$ 24.00	\$ 4,320.00	
Cylinder Pick-Ups	5 Trips	\$ 40.00	\$ 200.00	
SUBTOTAL:				\$ 19,932.00
CONCRETE PILE FABRICATION (PRECAST)				
Fabrication Inspection	120 Hours	\$ 65.00	\$ 7,800.00	
Compression Tests	90 Cylinders	\$ 24.00	\$ 2,160.00	
Sample Pick-Ups	15 Trips	\$ 40.00	\$ 600.00	
SUBTOTAL:				\$ 10,560.00
MASONRY				
Mix Design Reviews	2 Each	\$ 100.00	\$ 200.00	
Continuous Inspection	300 Hours	\$ 65.00	\$ 19,500.00	
Concrete Block Compression Masonry Prisms	8 Each	\$ 144.00	\$ 1,152.00	
Grout Compression Tests	15 Each	\$ 24.00	\$ 360.00	
Mortar Compression Tests	15 Each	\$ 24.00	\$ 360.00	
Sample Pick-Ups	6 Trips	\$ 40.00	\$ 240.00	
SUBTOTAL:				\$ 21,956.00
STRUCTURAL STEEL INSPECTION				
Welding Procedure Specification Review	1 Each	\$ 100.00	\$ 100.00	
Shop Fabrication Inspection	20 Hours	\$ 65.00	\$ 1,300.00	
Field Welding Inspection	32 Hours	\$ 65.00	\$ 2,080.00	
SUBTOTAL:				\$ 3,480.00
MISCELLANEOUS				
Final Affidavit			\$ 200.00	
Overtime Contingency			\$ 100.00	
Scope and Schedule Contingency			\$ 100.00	
Project Engineering and Management			N/A	
SUBTOTAL:				\$ 20,200.00
MAN-HOURS 1,120				
GRAND TOTAL WITH PRECAST PILES: \$				113,068.00



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CITY OF MILPITAS
EAST PARKING GARAGE
MILPITAS, CALIFORNIA

CEL #10-01108PW

REVISED
ALTERNATE PRICING

Description	Quantity	Unit Rate	Subtotals	
AUGERCAST PILES				
Mix Design Review	1 Each	\$ 160.00	\$ 160.00	
Reinforcing Steel	180 Hours	\$ 65.00	\$ 11,700.00	
Concrete Placement	180 Hours	\$ 65.00	\$ 11,700.00	
Compression Tests	54 Cylinders	\$ 24.00	\$ 1,296.00	
Sample Pick-Ups	9 Trips	\$ 40.00	\$ 360.00	
SUBTOTAL:			\$	25,156.00
MAN-HOURS		1,360	GRAND TOTAL WITH AUGERCAST PILES:	
			\$	127,664.00



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SCOPE OF SERVICES

REINFORCED CONCRETE

Mix Design Review

We will review the proposed concrete mixes in our laboratory for conformance with the specifications.

Reinforcing Steel Placement

Prior to the pours, our inspector will inspect the reinforcing steel placement to determine that it is according to plans and specifications. Our inspector will check:

- Size and spacing of bars;
- Location and length of splices;
- Clearances;
- Cleanliness of bars;
- Spacing tolerances;
- Proper support of steel with ties.

Concrete Placement

During the pours, our inspector will be on-site continuously, as required by Code, to monitor the placement. Our inspector will:

- Determine that no bars are displaced during pouring;
- Observe cleanliness of steel;
- Determine adequacy of placement and vibratory equipment;
- Determine proper delivery rate of concrete and monitor batch times;
- Determine the correct mix is being utilized;
- Monitor slump of each truck;
- Record temperature of air and concrete;
- Cast four cylinders for compression tests per plans and specifications;
- Perform air checks, if required by specifications, during concrete placement;
- Observe anchor bolt/dowel installation operations to determine hole depth, embedment and cleanliness, as well as materials and workmanship. We will inspect to determine all dowels are installed in accordance with contract documents and/or manufacturer's requirements.

Compression Testing

We will transport all samples to our laboratory for compression testing in strict accordance with ASTM requirements. Compression test reports will be distributed to the appropriate parties.

POST-TENSIONED CONCRETE

Tendon Test

Tendons shall be shipped directly to our Oakland facility for testing. Tendons should include identification of samples with the following information:

- Job name;
- Heat number;
- Reel number;
- Floor or level.



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An affidavit certifying that these tendons were sampled from the heat and reel number identified should be supplied with the tendons. Tendon tests will be performed in accordance with ASTM A416 for ultimate strength determination only.

Tendon/Reinforcing Placement

The day before a scheduled pour, we will dispatch a qualified inspector to check the tendon and reinforcing placement for conformance to the drawings and good construction practices. Our inspector will determine that the path of strands is the same as on the approved plans, and that tendons are securely tied and placed.

Concrete Placement

The General Notes require initial batch plant inspection for the post-tensioned concrete. Our inspector will witness the batching of the first truck and follow this truck to the jobsite.

During the pours, our inspector will be on-site continuously, as required by Code, to monitor the placement. Our inspector will:

- Determine that no bars are displaced during pouring;
- Observe cleanliness of steel;
- Determine adequacy of placement and vibratory equipment;
- Determine proper delivery rate of concrete and monitor batch times;
- Determine the correct mix is being utilized;
- Monitor slump of each truck;
- Record temperature of air and concrete;
- Cast six cylinders for compression tests as per plans and specifications;
- Perform air checks, if required by specifications, during concrete placement;
- Observe anchor bolt/dowel installation operations to determine hole depth, embedment and cleanliness, as well as materials and workmanship. We will inspect to determine all dowels are installed in accordance with contract documents and/or manufacturer's requirements.

Stressing

Continuous inspection will be required during the stressing operations. All elongations and jacking forces will be recorded as the work proceeds. Elongation measurements not within the five percent tolerance will be noted and immediately brought to the attention of the contractor, engineer and owner.

Compression Testing

We will transport all samples to our laboratory for compression testing in strict accordance with ASTM requirements. Reports of compression tests will be distributed to the appropriate parties.

CONCRETE PILE FABRICATION

The inspector will observe concrete batching procedures and concrete placement, and cast strength specimens. 6 x 12 specimens will be cast and steam cured for the initial 24-hour period prior to the first day, until they are transported to our laboratory for curing in accordance with ASTM standards. Our inspector will also witness the compressive strength tests from the previous day's casting to determine that the piles are of sufficient strength to be released from the forms. In addition, our inspector will observe the stressing of the tendons prior to the commencement of concrete placement.

MASONRY (COMPOSITE PRISM METHOD)

Mix Design Review

We will review the proposed grout and mortar mixes in our laboratory for conformance with the specifications.

Our inspector's duties will include the following:

- Review mill test certifications of block and reinforcing steel;
- Inspect to determine size and spacing of dowels;
- Inspect to determine that cleanouts are provided for high-lift grouting methods;
- Inspect proper lay-up of block units;
- Inspect reinforcing steel prior to grouting;
- Inspect dowels, anchor bolts and inserts, to make sure they are in place and properly secured prior to grouting;
- Inspect to determine proper consolidation of grout;
- Check that curing requirements are being followed;

Materials Testing:

- Witness preparation of composite prisms and test for compressive strength in our lab. UBC requires five tests 28 days prior to production, and three for every 5,000 square feet of wall for each block size.

STRUCTURAL STEEL

Shop Inspection

- Review of welding procedure specifications;
- Material identification and mill certificate review;
- Observe the utilization of certified welders and approved welding procedures;
- Visual inspection of welding to determine compliance with contract documents;
- Nondestructive testing of moment welds and column splices;
- Confirm approximate preheat temperature;
- Continuous inspection of multi-pass fillet welds, groove welds and reinforcing steel welding.

Field Inspection

- Observe the utilization of certified welders and approved procedures;
- Confirm approximate preheat temperature;
- Nondestructive testing of moment welds and column splices;
- Inspect to determine and observe proper installation and tightening of high strength bolts;
- Visual inspection of welding to determine compliance with contract documents;
- Continuous inspection of multi-pass fillet welds, groove welds and reinforcing steel welding.

Metal Deck/Shear Studs

Intermittent visual inspection will be conducted for metal deck and shear stud welding.

High-Strength Bolting

As required by the Uniform Building Code, at least two bolts per connection, or a minimum of ten percent (10%) of all high-strength bolts in slip critical connections, will be tested to the required torque per ASTM guidelines.



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NON-SHRINK GROUT

Non-Shrink Grout Placement

During the pours, our inspector will periodically monitor the placement. Our inspector will be performing the following duties:

- Determine the adequacy of placement and vibratory equipment;
- Observe proper delivery rate of non-shrink grout and monitor batch times;
- Observe that the correct mix is being utilized;
- Record temperature of air and concrete;
- Cast cubes for compression tests at the specified frequency.

Compression Testing

We will transport all samples to our laboratory for testing in strict accordance with ASTM requirements. Reports of compression tests will be distributed to the appropriate parties.



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ALTERNATE SCOPE OF SERVICES

AUGERCAST PILES

Mix Design Review

We will review the proposed concrete mixes in our laboratory for conformance with the specifications.

Reinforcing Steel Placement

Prior to the pours, our inspector will inspect the reinforcing steel placement to determine that it is according to plans and specifications. Our inspector will check:

- Size and spacing of bars;
- Location and length of splices;
- Clearances;
- Cleanliness of bars;
- Spacing tolerances;
- Proper support of steel with ties.

Concrete Placement

During the pours, our inspector will be on-site continuously, as required by Code, to monitor the placement. Our inspector will:

- Determine that no bars are displaced during pouring;
- Observe cleanliness of steel;
- Determine adequacy of placement and vibratory equipment;
- Determine proper delivery rate of concrete and monitor batch times;
- Determine the correct mix is being utilized;
- Monitor slump of each truck;
- Record temperature of air and concrete;
- Cast six cylinders for compression tests per plans and specifications;
- Perform air checks, if required by specifications, during concrete placement;
- Observe anchor bolt/dowel installation operations to determine hole depth, embedment and cleanliness, as well as materials and workmanship. We will inspect to determine all dowels are installed in accordance with contract documents and/or manufacturer's requirements.

Compression Testing

We will transport all samples to our laboratory for compression testing in strict accordance with ASTM requirements. Compression test reports will be distributed to the appropriate parties.



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TERMS OF AGREEMENT

FEES

Fees for our services will be billed on a time and expenses basis at the unit rates quoted. If subcontractors perform more quickly than scheduled, you will receive a cost savings for testing. If, however, subcontractors' schedules are extended or delayed, you receive a resulting increase in costs for testing. This cost proposal is based on the best information made available to us at the time the estimate was performed. Invoices are due 30 days from receipt. Past due invoices are subject to a finance charge of 1% per month.

FINAL AFFIDAVIT

The first invoice from Consolidated Engineering Laboratories shall include the estimated cost to prepare the Final Inspection Report. However, the Final Inspection Report will not be issued until the sixth working day following the request for the Final Inspection Report by the project representative, as described in greater detail below. Additionally, as a condition precedent to release of the Final Inspection Report, Client shall have paid in full for all services performed by Consolidated Engineering Laboratories pursuant to this Agreement.

INSPECTION

Inspection shall consist of visual observation of materials, equipment, or construction work for the purpose of ascertaining that the work is in substantial conformance with the contract documents. Such inspection shall not be relied upon by others as acceptance of the work nor shall it be construed to relieve the contractor in any way from his obligations and responsibilities under the construction contract. Specifically, but without limitation, inspection shall not require the inspector to assume responsibilities for the means and methods of construction nor for safety on the jobsite.

LIABILITY

In recognition of the relative risks of the Client and Consolidated Engineering Laboratories on the Project, Client agrees, to the extent permitted by law, that Consolidated Engineering Laboratories' liability to Client and any third party, in any way arising out of this Agreement, shall be limited to 100% of the total fees and costs paid to Consolidated Engineering Laboratories or \$25,000, whichever is greater.

HAZARDOUS MATERIALS REQUIREMENT

If hazardous materials will be encountered by our employees on your project site, specialized training or certifications are required by State and Federal agencies in order for our inspection personnel to perform their duties. All related costs for such specific training, including class time, will be billed to the client. Personnel time for necessary training classes will be billed at the hourly rate quoted herein with no markup.

ADDITIONAL SERVICES

Should additional services be requested that are not included in our proposed scope of services, we will provide these services at the unit rates listed in this proposal. Specialized engineering services, or services requiring the use of specialized equipment (coring, pachometer, nuclear densometer, radiography, etc.) will be performed at the costs listed in our published 2006 Fee Schedule.



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BASIS OF CHARGES

The proposed unit rates will be in effect through December 31, 2007. Thereafter, the unit rates are subject to an annual increase of seven percent (7%) per year to mitigate the annual operating cost increases.

Work over 8 Hours per day, or on Saturdays	Time and One-Half
Work over 12 Hours	Double Time
Work on Sundays/Holidays	Double Time
Swing or Graveyard Shift Premium	\$7.00 Per Hour
Work from 0-4 Hours	4-Hour Minimum Billing
Work from 4-8 Hours	8-Hour Minimum Billing
Show-Up Time	2-Hour Minimum Billing
Sample Pick-Up	\$40.00/Trip
Trip Charge	Not Applicable
Laboratory Testing – Rush Fee	Add 50% to Testing Cost
Final Affidavit (per permit number) (request six working days advanced notice)	\$200.00
Extra Copies (over four per issue date) of Inspection Reports and Final Affidavit	Not Applicable
Project Engineering and Management	Not Applicable
Reimbursables	Cost + 15%
QA/QC Plan Written Procedures	Quotation Upon Request
Out of Area Services (beyond 40-mile radius)	As Listed Below:
Travel Time	Basic Hourly Rate
Mileage	\$0.40/Mile
Per-Diem, including lodging	\$88.00/Day